

## REMARKS

In order to expedite prosecution, by this paper, Applicant has amended Claims 1, 12, 18, 23-28, 46, 49, 53, 59, and 62. Claims 6-11 have been canceled. Hence, Claims 1-5, and 12-68 remain pending and are presented for further examination.

### 1. Specification

In the Office Action, the Examiner maintained an objection to the specification, indicating that the specification failed to provide proper antecedent basis for the claimed subject matter, namely a “computer-readable storage medium.” However, it is unclear why this objection is maintained, as Applicant previously amended claims 53-65 to recite a “processor-readable storage medium” in order to expedite prosecution and overcome the objection. As stated in the previous Amendment, support for that amendment may be found in Applicant’s disclosure at least in paragraph [0060]. Accordingly, Applicant respectfully maintains the request that the objection be removed.

### 2. Claim Rejections – 35 U.S.C. § 102

In the Office Action, claims 1–3, 6–8, 11–12, 23, 26, 28–29, 31, 46–47, 49, 51, 53–54, 59 and 61 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kuchibholta (US 5,731,835, hereafter “Kuchibholta”). Applicant traverses the rejection. The applied reference fails to disclose each and every feature of the claims, as amended, as required by 35 U.S.C. § 102(b), and provides no teaching that would have suggested the desirability of modification to include such features.

In order to advance prosecution, Applicant has amended claim 1 to recite a method comprising:

using texture information in the portion to determine whether the portion comprises at most a predetermined amount of spatial information;

based on the determination, if the texture information indicates that the portion comprises at most the predetermined amount of spatial information, then categorizing the portion as nonpredictive; and

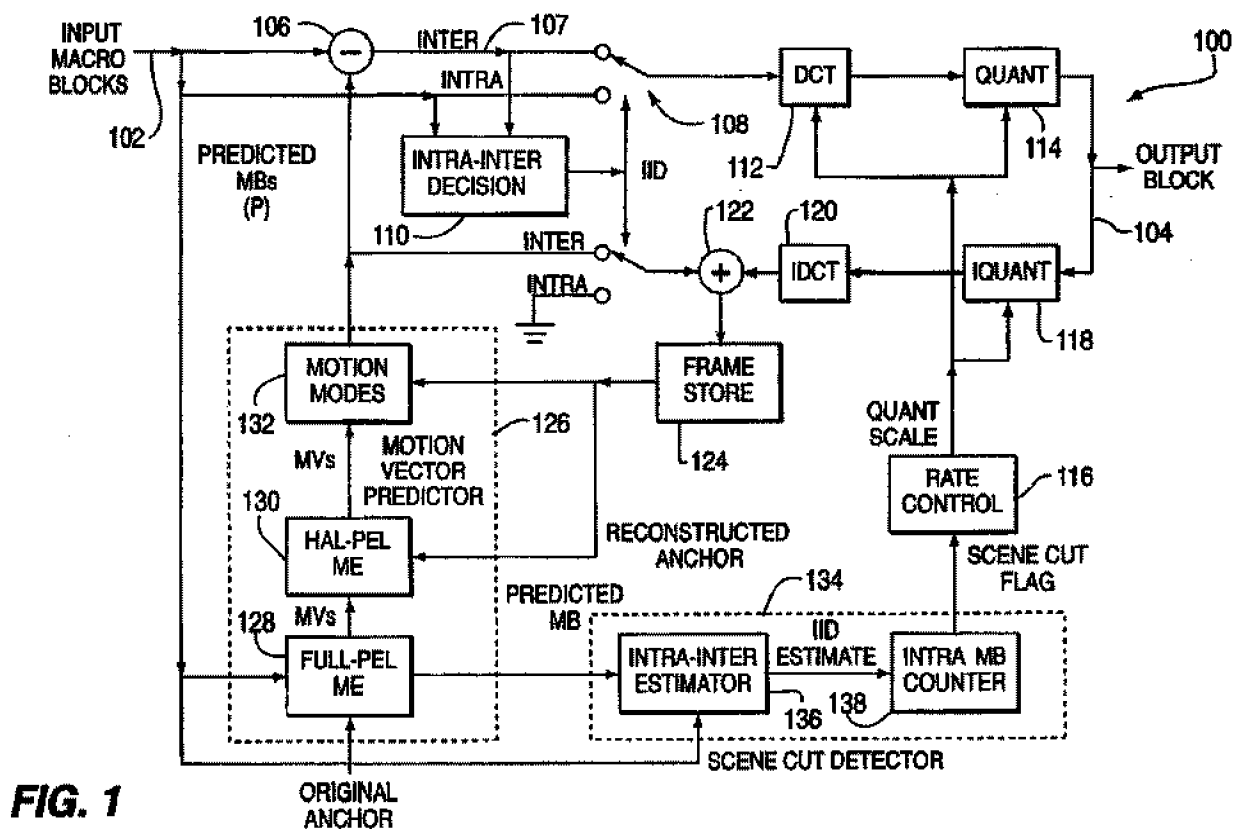
based on the determination, if the texture information indicates that the portion does not comprise at most a predetermined amount of spatial information, then:

in response to the determination, selectively performing motion estimation to generate motion information associated with the portion; and

using the motion information to determine whether the portion comprises at least a predetermined amount of predictive information.

Claim 1, as amended, recites “using texture information in the portion to determine whether the portion comprises at most a predetermined amount of spatial information [and] in response to the determination, selectively performing motion estimation to generate motion information associated with the portion (emphasis added).” Desirably, embodiments of Claim 1 allow selective bypassing of motion estimation and compensation calculations,<sup>1</sup> thus reducing the amount of processing resources consumed to encode portions of a video frame.<sup>2</sup>

As discussed in further detail below, Kuchibholta fails to disclose “selectively performing motion estimation” as recited by Claim 1. In particular, FIG. 1 of Kuchibholta is reproduced immediately below:



As seen above in FIG. 1 of Kuchibholta, Intra-Inter Decision (IID) block 110 selects between intra-coding and inter-coding based on the INTRA and INTER information received by IID 110. In contrast to claim 1, however, FIG. 1 of Kuchibholta

<sup>1</sup> Applicant's specification, paragraph [0039].

shows that in order for IID block 110 to select between intra-coding and inter-coding, motion estimation is *always* performed. In order to generate the INTER information at 107 that is input to IID 110, the coding system 100 of Kuchibholta disclose that one *for all macroblocks* generates motion vectors via motion vector predictor 126. Then, subtractor 106 subtracts the predicted macroblock (that was predicted using the generated motion vectors) from the input macroblock, thereby producing a residual macroblock.<sup>3</sup> IID 110 calculates the variance of the residual macroblock and the variance of the input macroblock in order to determine whether to code the macroblock using intra-coding or inter-coding.<sup>4</sup> FIG. 1 thus shows that, in order for IID 110 to make a coding decision, motion estimation is performed for all macroblocks..

In contrast, as discussed above, Claim 1, as amended, recites “using texture information in the portion to determine whether the portion comprises at most a predetermined amount of spatial information [and] in response to the determination, selectively performing motion estimation to generate motion information associated with the portion.” As Kuchibholta instead discloses performing motion estimation for each macroblock rather than “selectively perform[ing] motion estimation” as recited by Claim 1, Kuchibholta fails to teach or reasonably suggest all elements of Claim 1. Accordingly, Applicant respectfully submits that Kuchibholta fails to anticipate Claim 1.

While varying in scope, each of independent claims 12, 18, 23-28, 46, 49, 53, 59, and 62 recite features similar to the features discussed above with reference to Claim 1. Thus, for reasons similar to those presented above with respect to Claim 1, Kuchibholta also fails to teach or suggest all the elements of independent claims 23, 26, 28, 46, 49, 53, and 59. As each of Claims 2-3, 29, 31, 47, 51, 54, and 61, depends from one of Claims 12, 18, 28, 46, 49, or 59, Applicant respectfully submits that those claims are also patentable for at least the reasons discussed with respect to the corresponding independent claims. Accordingly Applicant requests that the rejection be withdrawn and that Claims 1-3, 6-8, 11-12, 23, 26, 28-29, 31, 46-47, 49, 51, 53-54, 59 and 61 be allowed.

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<sup>2</sup> Id. at paragraph [0033].

<sup>3</sup> Kuchibholta, col. 3, lines 10-14.

<sup>4</sup> Id. at col. 3, lines 29-37.

### **3. Discussion of Claim Rejections under 35 U.S.C. § 103**

In the Office Action, the Examiner rejected claims 4-5, 9-10, 13-14, 24-25, 27, 30, 32-34, 35-45, 48, 50, 52, 55-58, 60, 62-65 and 66-68 under 35 U.S.C. § 103 as being unpatentable over Kuchibholta in view of Kato (US 6,415,055, hereafter "Kato"). In addition, the Examiner rejected claims 15-17, 36-38, 43, 57-58 and 67-68 under 35 U.S.C. § 103 as being unpatentable over Kuchibholta in view of Sun (US 6,041,181, hereafter "Sun"). In addition, the Examiner rejected claims 25, 43 and 44 under 35 U.S.C. § 103 as being unpatentable over Kuchibholta in view of Westermann (US 6,307,886, hereafter "Westermann"). In addition, the Examiner rejected claim 42 under 35 U.S.C. § 103 as being unpatentable over Kuchibholta in view of Westermann as applied to claim 25, and further in view of Kato. In addition, the Examiner rejected claim 45 under 35 U.S.C. § 103 as being unpatentable over Kuchibholta in view of Westermann as applied to claim 25, and further in view of Sun. In addition, the Examiner rejected claims 32 and 52 under 35 U.S.C. § 103 as being unpatentable over Kuchibholta in view of Kim (US 2002/0196854, hereafter "Kim"). Finally, the Examiner rejected claims 18-22, 24, 27, 33-34, 39-41 and 62-65 under 35 U.S.C. § 103 as being unpatentable over Kuchibholta in view of Kodama et al. (US 5,963,673, hereafter "Kodama"). Applicants respectfully traverse the rejections. In particular, each of Claims 4-5, 13-17, 30, 32, 35-38, 48, 50, 52, 55, 60, and 66 depend either directly or indirectly from one of independent Claims 1, 12, 23, 26, 28, 46, 49, 53, and 59. Applicant respectfully submits that each of the other cited references, alone or in combination with Kuchibholta, fails to cure the deficiencies discussed above with respect to Kuchibholta. Accordingly, Applicant respectfully submits that Claims 4-5, 13-17, 30, 32, 35-38, 48, 50, 52, 55, 60, and 66 are patentable for at least the reasons discussed above with respect to independent claims 1, 12, 23, 26, 28, 46, 49, 53, and 59.

**4. CONCLUSION**

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested. If the Examiner has any questions that might be addressed by a telephonic conference, he is invited to telephone the undersigned.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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